# Poverty and Education: lowa vs. the Nation

Judy Jeffrey, Director

lowa Department of Education



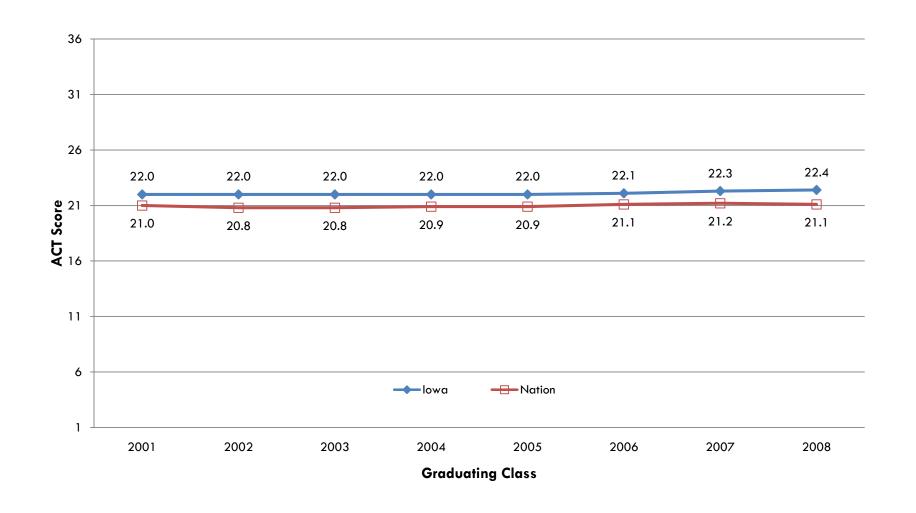
## **Our Current State**

Achievement

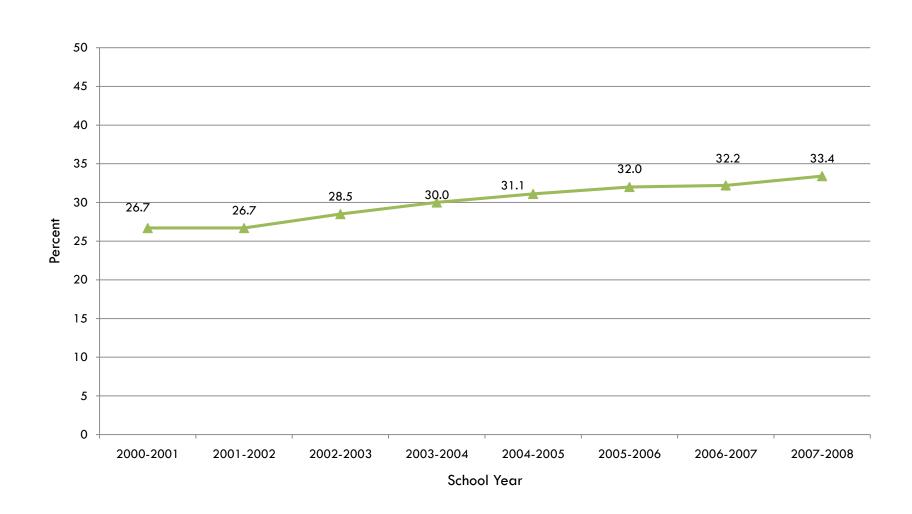
Course Taking Patterns

Desired State

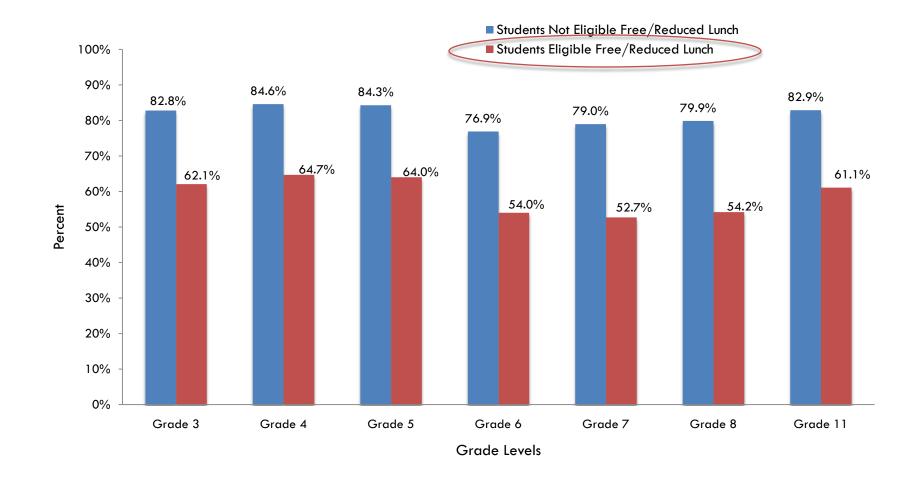
#### Average ACT Composite Scores for Iowa and the Nation 2001-2008



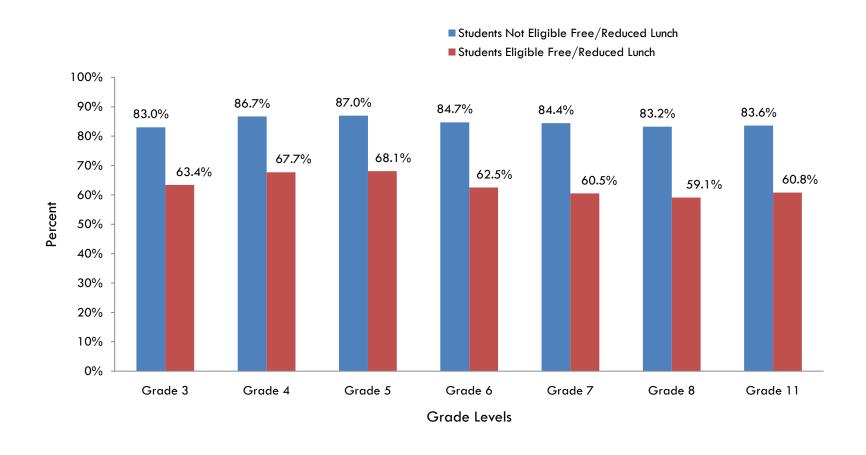
## Percent of Iowa's Public School Students Eligible for Free and Reduced-Price School Meals



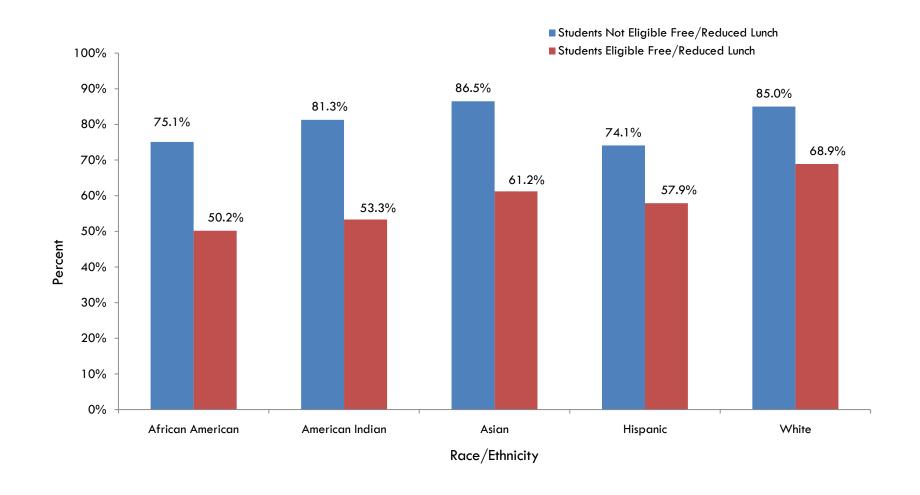
#### Percent of Students Proficient in *Reading*, 2007-2008



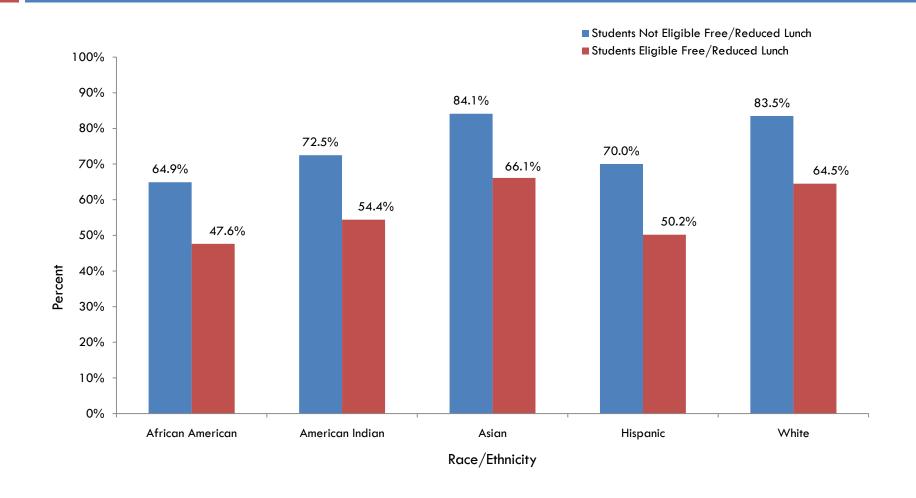
#### Percent of Students Proficient in *Mathematics*, 2007-2008



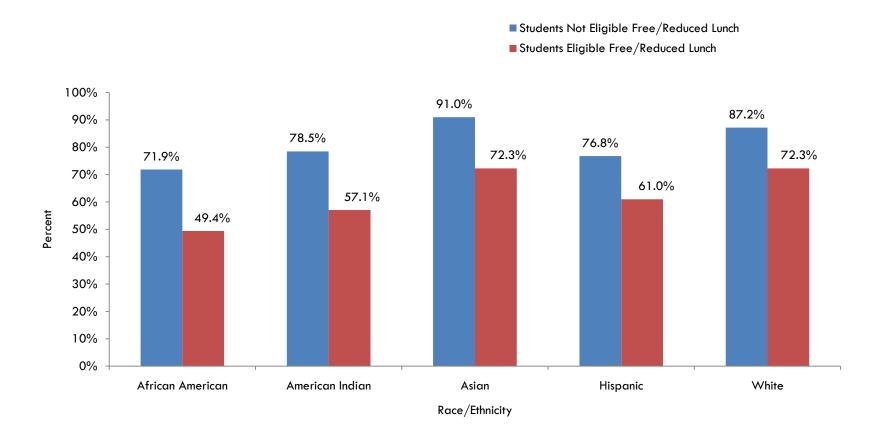
#### Grade 4 **Reading** by Race/Ethnicity, 2007-2008



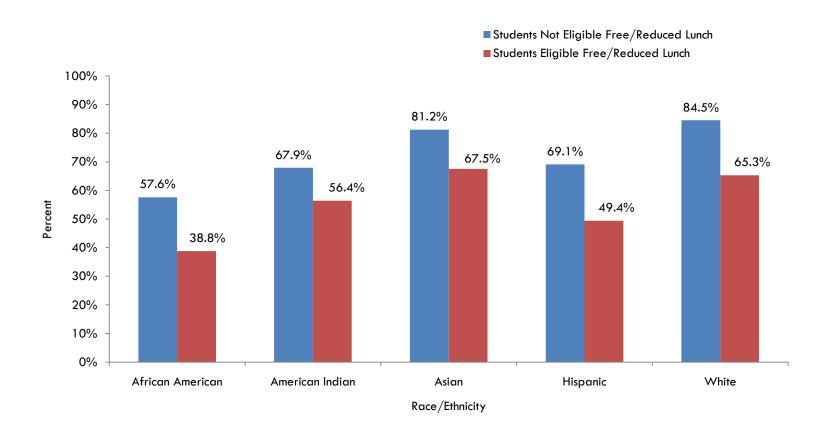
## Grade 11 **Reading** by Race/Ethnicity, 2007-2008



#### Grade 4 Mathematics by Race/Ethnicity, 2007-2008



#### Grade 11 Mathematics by Race/Ethnicity, 2007-2008



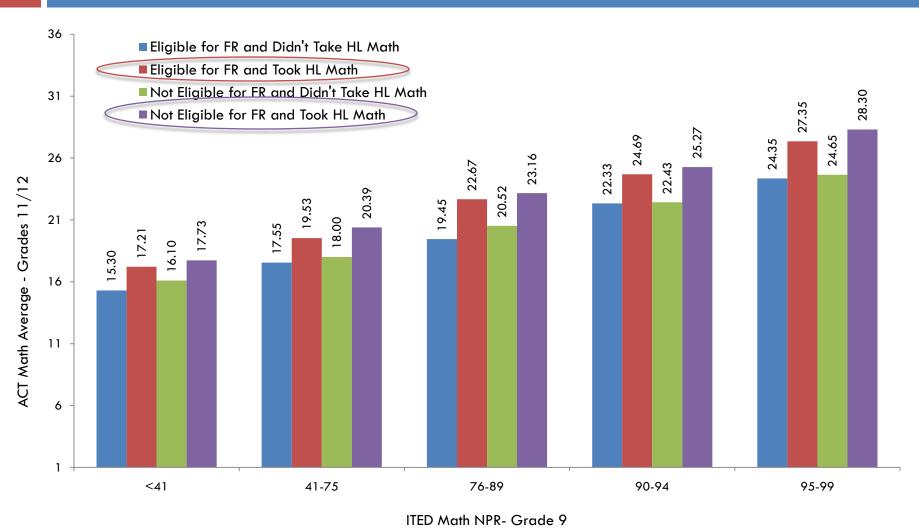
#### Iowa Data

| Graduating Class of 2008               | Number of<br>Students | Average ACT<br>Mathematics | Average ACT<br>Science<br>Reasoning |
|--|-----------------------|----------------------------|-------------------------------------|
| On-time Public School Graduates        | 31,130                |                            |                                     |
| ACT Test-takers (Public and Nonpublic) | 22,950                | 22.0                       | 22.3                                |
| Matched to the ID System and EASIER    | 19,252                | 22.0                       | 22.3                                |
| With Grade 9 ITED Scores in 2004-2005  | 16,138                | 22.1                       | 22.4                                |

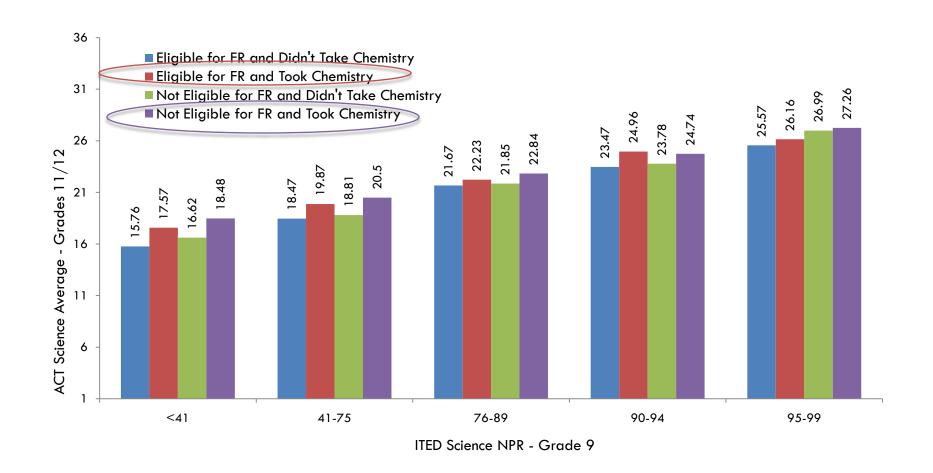
## List of Higher-Level Mathematics Courses

| Pre-Calculus                   |  |  |  |  |
|--------------------------------|--|--|--|--|
| Calculus                       |  |  |  |  |
| Trigonometry                   |  |  |  |  |
| Statistics                     |  |  |  |  |
| Advanced Placement Mathematics |  |  |  |  |
|                                |  |  |  |  |

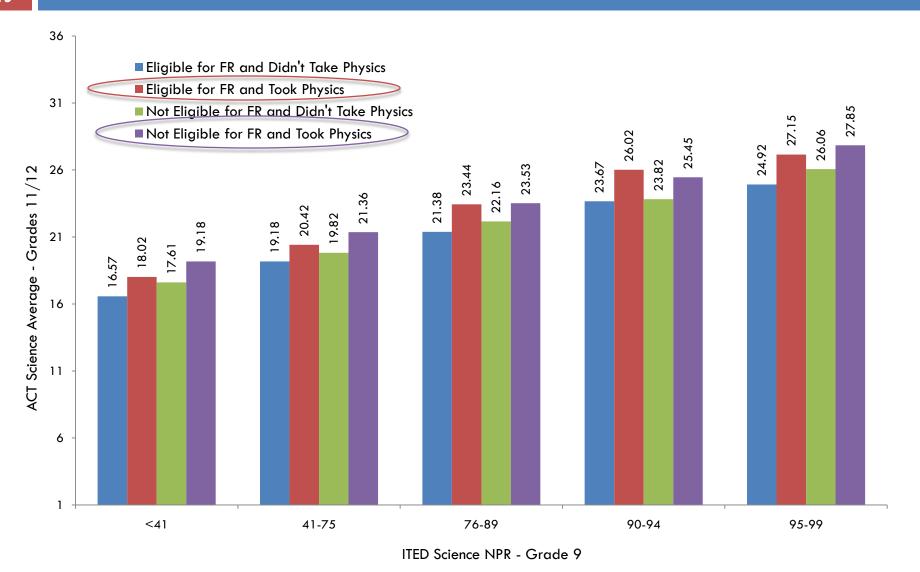
## Average ACT Mathematics vs. Higher-Level Mathematics Course Taken and Eligibility for Free/Reduced-Price Lunch



## Average ACT Science Reasoning vs. Chemistry Course Taken and Eligibility for Free/Reduced-Price Lunch



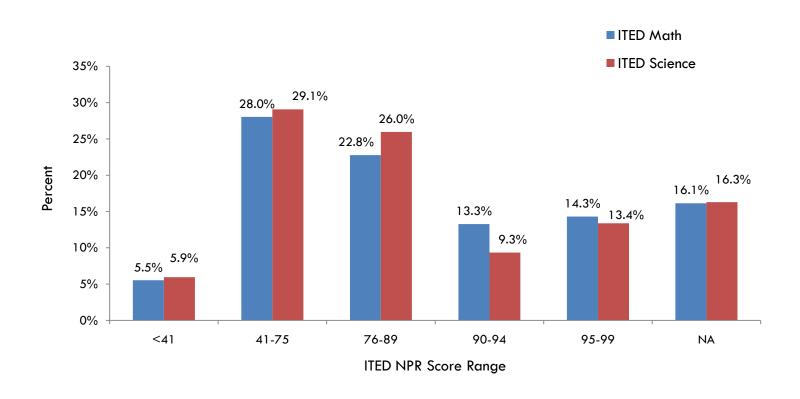
## Average ACT Science Reasoning vs. Physics Course Taken and Eligibility for Free/Reduced-Price Lunch



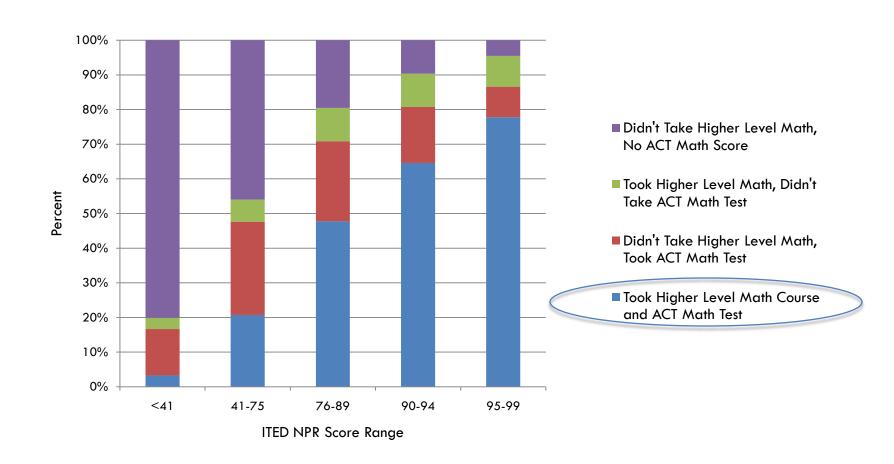
## Distribution of ITED NPR Scores for the 2004-2005 Grade 9 Students Who Took ACT in Grade 11 or 12 and Those Who Did Not

|  | ITED NPR Score Range |       |       |       |       | ITED  |
|--|----------------------|-------|-------|-------|-------|-------|
| Free/Reduced Eligible                            | <41                  | 41-75 | 76-89 | 90-94 | 95-99 | NA    |
| Number of Students with ITED and ACT Math Scores | 1,064                | 5,401 | 4,387 | 2,555 | 2,755 | 3,109 |
| Number of Students – Free/Reduced NOT Eligible   | 845                  | 4,720 | 4,003 | 2,361 | 2,588 | 2,746 |
| Number of Students – Eligible for Free/Reduced   | 219                  | 681   | 384   | 194   | 167   | 363   |
| Percent Students Eligible for Free/Reduced       | 20.6%                | 12.6% | 8.8%  | 7.6%  | 6.1%  | 11.7% |
| Number of Students with ITED Math Score – No ACT | 7,258                | 7,679 | 2,437 | 843   | 656   | 119   |
| Number of Students – Free/Reduced NOT Eligible   | 3,333                | 4,604 | 1,714 | 641   | 524   | 52    |
| Number of Students – Eligible for Free/Reduced   | 3,925                | 3,075 | 723   | 202   | 132   | 67    |
| Percent Students Eligible for Free/Reduced       | 54.1%                | 40.0% | 29.7% | 24.0% | 20.1% | 56.3% |

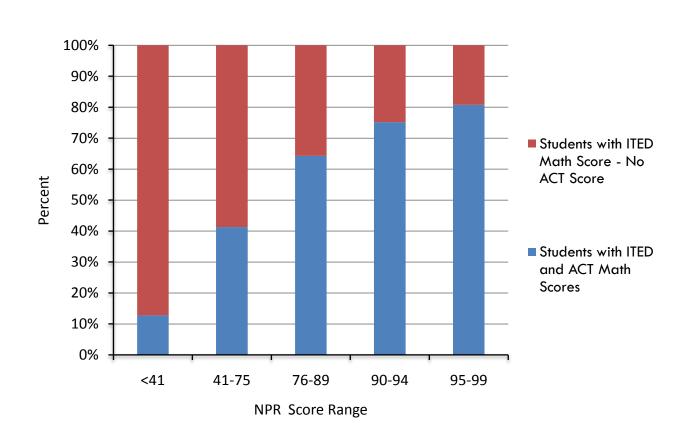
Appendix B-6
ITED NPR Score Distributions of Ninth Graders in 2004-2005
who Took ACT in Grades 11/12



## Appendix A-1 Distributions by ITED Mathematics NPR



## Appendix A-2 ITED NPR Score Distributions — Students Who Took ACT vs. Students Who Did Not



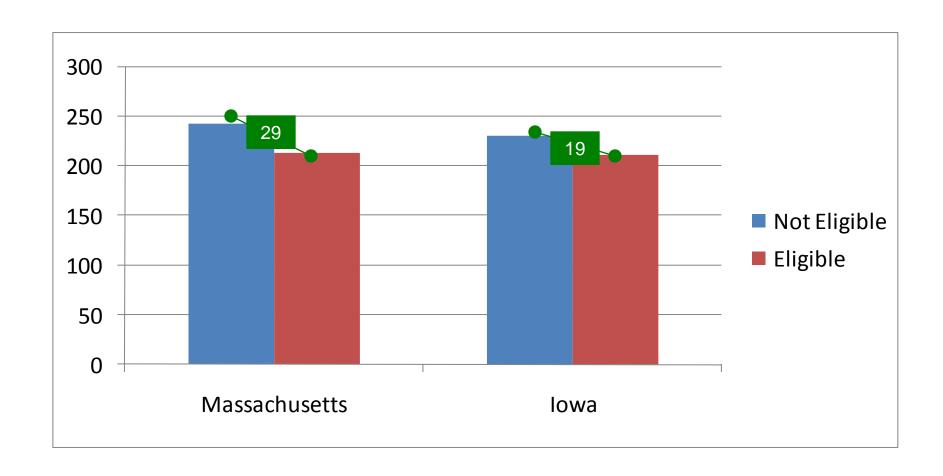
## Appendix B-2 Race/Ethnicity Distributions

| Race/Ethnicity   | Percent for Students<br>with ACT<br>Mathematics Scores | Percent of<br>9 <sup>th</sup> Graders<br>in 2004-2005 |
|------------------|--|---|
| African American | 2.2%   | 4.7%  |
| American Indian  | 0.2%   | 0.6%  |
| Asian            | 2.1%   | 1.7%  |
| Hispanic         | 1.8%   | 4.9%  |
| White            | 93.7%  | 88.1%   |

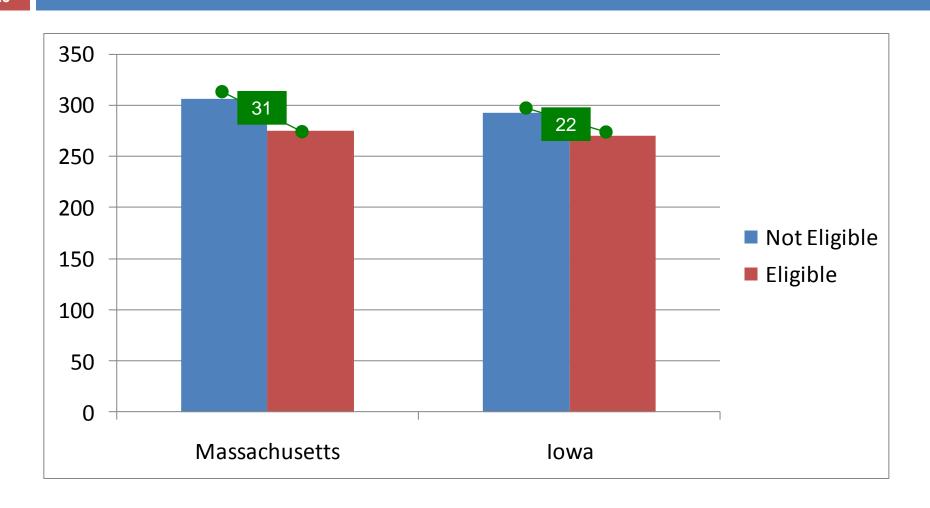
## Appendix B-4 Percent of Students Who Took at Least One Higher-Level Mathematics or Science Course

|                          | Students with ACT Scores | Students in Graduating<br>Class of 2008 |
|--------------------------|--------------------------|---|
| Higher-Level Mathematics | 59.6%                    | 37.1%                                   |
| Chemistry                | 82.9%                    | 59.4%                                   |
| Physics                  | 38.8%                    | 24.8%                                   |

## 2007 NAEP Reading Poverty Gaps Grade 4



## 2007 NAEP Mathematics Poverty Gaps Grade 8



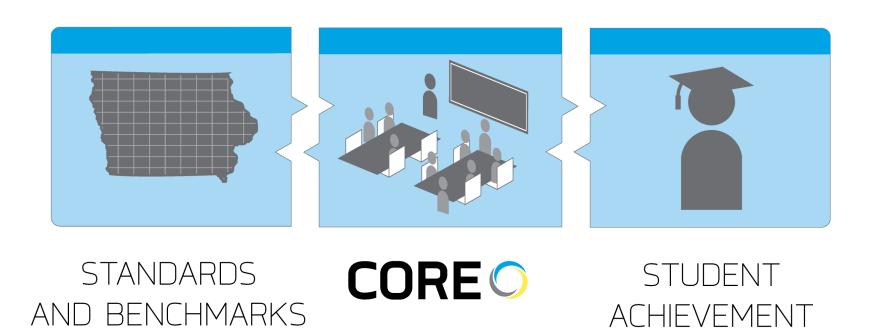
## **ACT District Examples**

| District   | Average<br>ACT<br>Math | Average ACT<br>Science<br>Reasoning | Grade 11<br>ITED Math  | Percent Took<br>Higher-Level<br>Math | Percent<br>Took<br>Chemistry | Percent<br>Took<br>Physics | High School<br>Size | Percent<br>Free/Reduced<br>Lunch |
|--|------------------------|-------------------------------------|--|--------------------------------------|------------------------------|----------------------------|---------------------|----------------------------------|
|  |                        | Characteris                         | Characteristics for the few selected districts with ACT scores above the state average |                                      |                              |                            |                     |                                  |
| Α  | 22.6                   | 22.4                                | 78.1%  | 42.4%                                | 65.7%                        | 22.2%                      | 220-499             | 30.2%                            |
| В  | 22.0                   | 22.3                                | 81.1%  | 51.7%                                | 60.0%                        | 26.2%                      | 500-999             | 30.9%                            |
| С  | 22.1                   | 22.4                                | 86.1%  | 65.4%                                | 73.6%                        | 14.6%                      | 1000-1300           | 20.6%                            |
| D  | 23.5                   | 23.5                                | 77.5%  | 48.1%                                | 59.3%                        | 30.9%                      | 220-499             | 37.2%                            |
| E  | 22.2                   | 22.4                                | 91.5%  | 54.0%                                | 68.6%                        | 26.3%                      | 500-999             | 25.7%                            |
| F  | 22.8                   | 22.6                                | 80.8%  | 45.7%                                | 48.2%                        | 42.8%                      | 1000-1300           | 37.5%                            |
| G  | 23.4                   | 23.2                                | 78.1%  | 58.3%                                | 62.6%                        | 33.1%                      | 500-999             | 28.1%                            |
|  |                        | Characteris                         | Characteristics for the few selected districts with ACT scores below the state average |                                      |                              |                            |                     |                                  |
| Н  | 17.6                   | 18.0                                | 69.2%  | 15.6%                                | 48.9%                        | 13.3%                      | 220-499             | 50.9%                            |
| ı  | 18.9                   | 19.8                                | 66.7%  | 16.9%                                | 61.0%                        | 20.3%                      | 220-499             | 19.9%                            |
| J  | 20.5                   | 20.3                                | 71.0%  | 25.3%                                | 61.5%                        | 21.8%                      | 500-999             | 32.9%                            |
| K  | 19. <i>7</i>           | 20.4                                | 84.5%  | 20.6%                                | 34.9%                        | 11.1%                      | 220-499             | 33.4%                            |
| L  | 20.1                   | 21.1                                | 76.4%  | 20.4%                                | 64.8%                        | 11.1%                      | 220-499             | 31.4%                            |
| M  | 19.7                   | 20.1                                | 66.7%  | 6.8%                                 | 41.5%                        | 8.5%                       | 500-999             | 48.6%                            |
| N  | 19.5                   | 21.2                                | 87.3%  | 21.4%                                | 68.6%                        | 20.0%                      | 220-499             | 28.4%                            |
|  |                        |                                     |  |                                      |                              |                            |                     |                                  |
| State  | 22.0                   | 22.3                                | 78.7%  | 37.1%                                | 59.4%                        | 24.8%                      | 200-499             | 33.4%                            |
| Most districts listed had at least 50% of the graduates that took ACT. |                        |                                     |  |                                      |                              |                            |                     |                                  |

## **Desired State**

Core concepts & skills for all students regardless of postsecondary goals or career track.

## Iowa Core Curriculum



## Iowa Core Curriculum

- Essential Skills & Concepts
  - Reading
  - Math
  - Science
  - Social studies
  - But more...



## Iowa Core Curriculum

- □ 21<sup>ST</sup> Century Skills
  - Financial Literacy
  - Health Literacy
  - Technology Literacy
  - Civic Literacy
  - Employability Skills

Global Literacy – to come

## Beyond "Basics"

99%

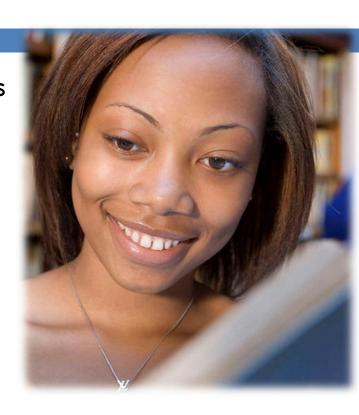
 Of voters say our country's future economic success is teaching & learning 21<sup>st</sup> century skills

80%

 Of voters say the skills students need for today's jobs is different than 20 years ago

## Benefits to Our Students

- Ensures that students will grasp big ideas
- Moves students to deep conceptual and procedural knowledge
- Provides students opportunities to learn rigorous, robust content through effective instruction
- Enhances student engagement by involving students in interesting, relevant learning experiences



# Right Time, Right Work, Right People

